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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,862	07/23/2001	Jean-Michel Guirman	BDL-352XX	1507
207	7590	02/17/2004	EXAMINER	
WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP			AFTERGUT, JEFF H	
TEN POST OFFICE SQUARE			ART UNIT	PAPER NUMBER
BOSTON, MA 02109			1733	
DATE MAILED: 02/17/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p>09/889,862</p>	<p>Applicant(s)</p> <p>GUIRMAN ET AL. </p>	
	<p>Examiner</p> <p>Jeff H. Aftergut</p>	<p>Art Unit</p> <p>1733</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-68 is/are pending in the application.
- 4a) Of the above claim(s) 30-40, 46, 47, 53 and 54 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 and 56-68 is/are allowed.
- 6) ☒ Claim(s) 1-19, 25-27, 41-44, 48-50 and 55 is/are rejected.
- 7) ☒ Claim(s) 21, 23, 24, 28, 29, 45, 51 and 52 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <p>1) <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</p> <p>Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)</p> <p>Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|---|

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-9, 11-13, 19, 41-44 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olry et al '217 in view of Olry et al '348 for the same reasons as previously presented in paper no. 7, paragraph 3.
3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 2 further taken with Shepherd et al for the same reasons as expressed in paper no. 7, paragraph 4.
4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 2 further taken with Thebault for the same reasons as expressed in paper no. 7, paragraph 5.
5. Claims 1-13, 16-19, 25, 26, 41-44, 48-50, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh in view of Olry et al '217 and Olry et al '348 for the same reasons as expressed in paper no. 7, paragraph 6.
6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in either paragraph 2 or paragraph 5 further taken with Monget et al and Cahuzac for the same reasons as expressed in paper no. 7, paragraph 7.
7. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 5 further taken with E.P. 913,504 and any one of Metter et al, Kondo et al or Holcombe et al for the same reasons as expressed in paper no. 7, paragraph 9.

Allowable Subject Matter

8. Claims 22 and 56-68 are allowed.

None of the prior art of record taught or suggested that those skilled in the art would have formed a bowl of thermostructural material with a hole therein by laying up preformed fabrics which each had a substantially central opening therein where the openings in the fabric were aligned when the plies of fabric were superposed onto each other in the processing to thereby provide a finished assembly with an opening therein. The reference to E.P. '504 merely would the perform thereby providing the opening in the central portion of the bowl and the reference to Soviet Union '755 drilled out the hole and did not provide the same in the manufacture of a thermostructural bowl but rather was performing this operation to repair a composite bowl.

9. Claims 21, 23, 24, 28, 29, 45, 51, and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the prior art of record taught or suggested the assembly of the fabrics in the manner recited followed by the formation of a hole in the assembly prior to densification of the perform and subsequently closing of the hole with a plug. While Soviet Union '755 formed a hole in the assembly, the reference did not provide for the same prior to densification but rather appears to be repairing a previously densified assembly wherein a plug was used to repair the damaged area.

Election/Restrictions

10. Claims 30-40, 46, 47, 53, and 54 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable

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generic or linking claim. Election was made **without** traverse in Paper No. 6 (note that applicant did not traverse the restriction requirement with an identification of the supposed errors in the same and thus the restriction is being treated as an election without traverse).

Response to Arguments

11. Applicant's arguments filed 12-4-03 have been fully considered but they are not persuasive.

The applicant essentially argues that the references to Olry '217 and Olry '348 must within the meets and bounds of the references expressly state that the fabric plies employed in the processing are free from any cutouts or slots therein. This has not been found to be persuasive for the following reasons. The reference to Olry '217 clearly recited that deformable fabrics would have been placed upon the form prior to the needling of the material together, see column 4, lines 6-13 of Olry '217. It is of import to note that in Olry '217 there is no mention of cutting an opening or slot in the fabric in the processing. While this may have been the usual practice according to applicant in the prior art, the reference to Olry '217, had it been seen as necessary, would have stated that a cut was formed in the material in order to prevent overlapping folding and/or wrinkling of the fabric plies. The reference to Olry '348 suggested that those skilled in the art would have known what was meant by the "deformable fabrics" of Olry '217. These materials deform during lay up and thus do not wrinkle and/or overlap to increase the thickness of the material as expressed by Olry '348 at column 6, lines 35-44 for example. The references thus suggested that use of a deformable fabric material would have allowed one to lay the fabric plies upon the form without the application of cuts and/or slots in

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the fabrics whereby the fabric was deformed to the shape of the form it was laid upon. Why else would one skilled in the art have been led to utilize the deformable fabrics in the processing of Olry '217? It would appear that these fabrics were selected because they would have taken the shape of the form without the need for cutting the fabrics to the specified shapes. Clearly, processing which was free from cutting and/or formation of slots was clearly envisioned by Olry '217 and Olry '348 as expressed in paper no. 7. Applicant's arguments are not persuasive in this regard.

Regarding claim 9, note that the reference to Shepherd. The applicant does not specifically address the teachings of the reference other than to state that the reference did not cure the deficiencies of the other references. Because no such deficiencies exist, and because it is deemed that applicant agrees with the Office interpretation of Shepherd due to the lack of remarks relating to the same, the rejection of claim 9 stands as previously presented.

Regarding Walsh and the formation of the crucible from two parts, the applicant is advised that the reference to Walsh expressly suggested that one skilled in the art at the time the invention was made would have utilized conventional three-dimensional fabric forming techniques in the formation of the crucible. While two separate parts were formed as depicted in Figure 2 of Walsh, one skilled in the art would have readily appreciated that an integral one piece three dimensional fabric material for the perform was possible as evidenced by Olry '217 and that the use of the same intrinsically would have reduced the manipulative steps in the formation of the crucible by eliminating the need to assemble two parts for example and would have provided one with a superior one piece product. To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly

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suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” Ex parte Clapp, 227 USPQ 972, 973. Clearly, one would have been motivated to utilize a one piece assembly in light of the evidence presented.

The other references applied (Thebault, Monget, Cahuzac) are not discussed at length by applicant, rather applicant is relying upon the patentability of claim 1 as a basis for the patentability of the dependent claims which these additional references were applied. As applicant has failed to directly address the teachings of these references, applicant has acquiesced to the teachings as presented by the Office in the Office action. It is believed that applicant agrees with the Office interpretation of these references. Additionally, because claim 1 has not been found allowable, the claims rejected with these additional references likewise fall.

Regarding claims 21-24, 28, 29, 45, 51, 52, and 56-68, the applicant is referred to paragraphs 8 and 9 above and the indication that these claims define over the prior art of record.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

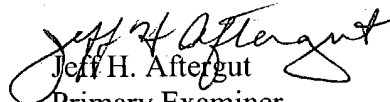
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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
February 4, 2004